EUROPA Documentation

This page provides in-depth documentation on understanding and using EUROPA. If you don't know where to start, or just want a quick overview of how to use EUROPA, take a look at the EUROPA Quick Start. You can also find an overview of the EUROPA framework and philosophy at Europa Background.

Architecture

- Overview
- Propagation Services
- Plan Database Services
- Modeling Services
- Problem Solving Services
- Ancillary Modules

EUROPA Components

- NDDL:
    - ♦ NDDL Language Reference
    - ♦ Complete NDDL Grammar (for ANTLR)
    - ♦ NDDL Parser/Compiler
- Constraints:
    - ♦ Constraint Library Reference
    - ♦ Adding a Constraint
- Solver:
    - ♦ Built-in Solver Description
    - ♦ Built-in Solver Configuration
    - ♦ Extending the built-in solver
        - ◊ Adding a Flaw Filter
        - ◊ Adding a Flaw Handler
        - ◊ Adding a Flaw Manager
    - ♦ Building your own Solver
- Listeners:
    - ♦ Adding a Listener *TODO! Entries for different listener types
- API (TODO: add link to Doxygen/JavaDoc? docs)
    - ♦ PSEngine This interface is also available in Java (we use SWIG to do the mapping automatically)
    - ♦ Assemblies : StandardAssembly, SolverAssembly
- Notes on Using Resource Search Operators

Development Tools

- How to embed EUROPA in an application
- makeproject: Automatically create all the pieces for a new project.
- High-level visualization and debugging:
    - PSDesktop: Java app to drive (and visualize) EUROPA interactively.
    - PlanWorks: Java app to visualize plan details over time.
        - PlanWorks Tutorial
        - PlanWorks.cfg Reference
- Low-level debugging:
    - Debug Output Management
    - Timelines
    - The Token Network
    - The Constraint Network
    - Metric Resources
    - Common Debugging Scenarios

Miscellaneous

- Glossary
- References